

What is claimed is:

1. A method for registering an irrevocable right to use (IRU) in a network supporting one or more IRU service providers connected to the network, comprising the steps of:

locking onto one of an access network dynamic host configuration protocol (DHCP) server and an IRU DHCP server by a modem;

determining if the modem is known by the one of the access network DHCP server and the IRU DHCP server;

downloading service parameters to the modem if it is determined in the determining step that the modem is known;

redirecting the modem to the access network DHCP server to download service parameters if the modem locked onto the IRU DHCP server in the locking step and it was determined in the determining step that the modem was not known by the IRU DHCP server to be a known IRU modem; and

redirecting the modem to the IRU DHCP server to download service parameters if the modem locked onto the access network DHCP server in the locking step and it was determined in the determining step that the modem was not known by the access network DHCP server to be a known access network modem.

2. The method of Claim 1, wherein the irrevocable right to use comprises a specified allocation of at least one of an upstream bandwidth and a downstream bandwidth.

3. The method of Claim 1, wherein:

the network comprises an open access network managed by a network provider, and the irrevocable right to use is allocated to a third party.

4. The method of Claim 1, further comprising the following steps after the determining step and prior to the downloading step:

detecting a modem address of the modem if the modem locked onto the access network DHCP server in the locking step and it was determined in the determining step that the modem was not known by the access network DHCP server;

storing the modem address in a digital repository; and

ascertaining whether the modem address corresponds to a known IRU modem.

5. The method of Claim 4, further comprising the following step prior to the ascertaining step:

providing to an operator of the access network at least one of the modem address and other modem information through at least one of an electronic message and a manual message.

6. The method of Claim 4, further comprising the step of:

redirecting the modem to the IRU DHCP server if it is determined in the ascertaining step that the modem corresponds to a known IRU modem.

7. The method of Claim 6, further comprising the step of:

resetting the modem with a temporary configuration file if it is determined in the ascertaining step that the modem does not correspond to a known IRU modem, wherein the temporary configuration file is configured to be used by the modem until the modem is successfully registered.

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8. The method of Claim 7, further comprising the step of:

reporting by an operator of the access network at least one of the modem address and other modem information to the IRU DHCP server after the modem address becomes a known IRU modem address.

9. The method of Claim 7, further comprising the step of:

resetting the modem after the modem address becomes one of a known access network modem address and a known IRU modem address.

10. The method of Claim 6, wherein resetting the modem comprises using a simple

network management command.

11. The method of Claim 1, wherein the service parameters are downloaded using at

least one of a trivial file transfer protocol, a file transfer protocol, and another transfer utility.

12. The method of Claim 4, wherein the address comprises a media access control

address.

13. The method of Claim 1, wherein the service parameters are stored in a memory of

the modem.

14. The method of Claim 13, wherein the memory comprises a management

information base of the modem.

15. The method of Claim 1, wherein the service parameters comprise at least one of a downstream frequency and an upstream frequency.

16. A system for registering an irrevocable right to use (IRU) in a network supporting one or more IRU service providers connected to the network, comprising:

means for locking onto one of an access network dynamic host configuration protocol (DHCP) server and an IRU DHCP server by a modem;

means for determining if the modem is known by the one of the access network DHCP server and the IRU DHCP server;

means for downloading service parameters to the modem if it is determined in the determining step that the modem is known;

means for redirecting the modem to the access network DHCP server to download service parameters if the modem locked onto the IRU DHCP server in the locking step and it was determined in the determining step that the modem was not known by the IRU DHCP server to be a known IRU modem; and

means for redirecting the modem to the IRU DHCP server to download service parameters if the modem locked onto the access network DHCP server in the locking step and it was determined in the determining step that the modem was not known by the access network DHCP server to be a known access network modem.

17. A system for registering an irrevocable right to use (IRU) in a network supporting one or more IRU service providers connected to the network, comprising:

a processor; and

a computer readable medium encoded with processor readable instructions that when executed by the processor implement

an access network dynamic host configuration protocol (DHCP) server connection mechanism configured to be accessed by modems requesting access to the network,

an IRU DHCP server connection mechanism configured to be accessed by modems requesting access to the network,

an identification mechanism configured to determine if a modem connected to one of the access network DHCP server and the IRU DHCP server is known to the one of the access network DHCP server and the IRU DHCP server,

a service parameter transfer mechanism configured to transfer service parameters to the modem if the identification mechanism determines that the modem is known to the one of the access network DHCP server and the IRU DHCP server,

an access network DHCP server redirecting mechanism configured to redirect the modem to the access network DHCP server to download service parameters if the identification mechanism determines that the modem is not known to the IRU DHCP server as a known IRU modem, and

an IRU DHCP server redirecting mechanism configured to redirect the modem to the IRU DHCP server to download service parameters if the identification mechanism determines that the modem is not known to the access network DHCP server as a known access network modem.

18. The system of Claim 17, wherein the irrevocable right to use comprises a specified allocation of at least one of an upstream bandwidth and a downstream bandwidth.

19. The system of Claim 17, wherein:

the network comprises an open access network managed by a network provider, and
the irrevocable right to use is allocated to a third party.

20. The system of Claim 17, wherein the computer readable medium is further
encoded with processor readable instructions that when executed by the processor further
implements

an end-user sign-in mechanism configured to detect an address of the modem if it was
determined by the identification mechanism that the modem was not known by the access
network DHCP server, store the modem address in a digital repository, and determine
whether the modem address corresponds to a known IRU modem.

21. The system of Claim 20, wherein:

the end-user sign-in mechanism is further configured to reset the modem if it is
determined that the modem address does not correspond to a known IRU modem, report the
modem address to the IRU DHCP server, and reset the modem if it is determined that the
modem address corresponds to a known IRU modem.

22. The system of Claim 21, wherein resetting the modem comprises using a simple
network management command.

23. The system of Claim 17, wherein the service parameters are downloaded using at
least one of a trivial file transfer protocol, a file transfer protocol, and another transfer utility.

24. The system of Claim 20, wherein the address comprises a media access control address.

25. The system of Claim 17, wherein the service parameters are stored in a memory of the modem.

26. The system of Claim 25, wherein the memory comprises a management information base of the modem.

27. The system of Claim 17, wherein the service parameters comprise at least one of a downstream frequency and an upstream frequency.

28. A computer program product, comprising:

a computer storage medium; and

a computer program code mechanism embedded in the computer storage medium for causing a processor to register an irrevocable right to use (IRU) in a network supporting one or more IRU service providers connected to the network, the computer program code mechanism having,

a first computer code device configured be accessed as an access network dynamic host configuration protocol (DHCP) server by modems requesting access to the network,

a second computer code device configured to be accessed as an IRU DHCP server by modems requesting access to the network,

a third computer code device configured to determine if a modem connected to one of the access network DHCP server and the IRU DHCP server is known to the one of the access network DHCP server and the IRU DHCP server,

a fourth computer code device configured to transfer service parameters to the modem if the third computer code device determines that the modem is known to the one of the access network DHCP server and the IRU DHCP server,

a fifth computer code device configured to redirect the modem to the access network DHCP server to download service parameters if the third computer code device determines that the modem is not known to the IRU DHCP server as an IRU modem, and

a sixth computer code device configured to redirect the modem to the IRU DHCP server to download service parameters if the third computer code device determines that the modem is not known to the access network DHCP server as an access network modem.

29. The computer program product of Claim 28, wherein the irrevocable right to use comprises a specified allocation of at least one of an upstream bandwidth and a downstream bandwidth.

30. The computer program product of Claim 28, wherein:
the network comprises an open access network managed by a network provider, and
the irrevocable right to use is allocated to a third party.

31. The computer program product of Claim 28, wherein the computer program code mechanism further includes

a seventh computer code device configured to detect a modem address of the modem if it was determined by the third computer code device that the modem was not known by the access network DHCP server, store the modem address in a digital repository, and determine whether the modem address corresponds to a known IRU modem.

32. The computer program product of Claim 31, wherein:

the seventh computer code device is further configured to redirect the modem to the IRU DHCP server if it is determined that the modem address corresponds to a known IRU modem.

33. The computer program product of Claim 32, wherein:

the seventh computer code is further configured to reset the modem with a temporary configuration file if it is determined that the modem does not correspond to a known IRU modem.

34. The computer program product of Claim 33, wherein:

the seventh computer code is further configured to report the modem address to the IRU DHCP server after the modem address becomes a known modem address.

35. The computer program product of Claim 33, wherein:

the seventh computer code is further configured to reset the modem after the modem address becomes one of a known access network modem address and a known IRU modem address.

36. The computer program product of Claim 32, wherein resetting the modem comprises using a simple network management command.

37. The computer program product of Claim 28, wherein the service parameters are downloaded using at least one of a trivial file transfer protocol, a file transfer protocol, and another transfer utility.

38. The computer program product of Claim 31, wherein the address comprises a media access control address.

39. The computer program product of Claim 28, wherein the service parameters are stored in a memory of the modem.

40. The computer program product of Claim 39, wherein the memory comprises a management information base of the modem.

41. The computer program product of Claim 28, wherein the service parameters comprise at least one of a downstream frequency and an upstream frequency.